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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,508	07/22/2003	Sang Won Chung	CHUN3059/EM	5802
23364 7590 12/27/2006 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			EXAMINER CAO, PHUONG THAO	
			ART UNIT 2164	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/27/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/623,508

Applicant(s)

CHUNG, SANG WON

Examiner

Phuong-Thao Cao

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 5-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is in response to Amendment filed on 10/02/2006.
2. Claim 1 has been amended and claims 2-3 and 9 have been cancelled. Currently, claims 1 and 5-8 are pending.

### ***Response to Arguments***

3. Applicant's arguments filed on 10/02/2006 have been fully considered but they are not persuasive.

Regarding Applicant's arguments that Shah et al. fails to disclose or suggest a method of controlling a user application program in which a request for an arbitrary data block:

- (a) causes a file streaming readout function to initially identify a priority file with which the data block is associated;
- (b) checks whether the data block is locally stored; and
- (c) retrieves the data block from a predetermined server if it is not locally stored.

Shah et al. teaches in paragraphs [0018], [0020], [0141], [0156] and [0188] a request for application code and data can be satisfied by local cache or the streaming application server, wherein requested data is identified by Application ID, File ID and Block ID (see [0132], [0156], [0187] and [0188]) and the application file in a Streamed Application Set or the file contain the appropriate bits ([0134], and [0141], [0318]-[0323]) is equivalent to Applicant's "priority file".

Regarding Applicant's argument that Shah et al. does not teach pre-storage of the priority blocks on a "predetermined server", Shah et al. teaches the creation of the Streamed Application Set (SAS) (see [0084]-[0090] and [0318]-[0319]) based on identifying sequences of frequently accessed application pages so each SAS pages or application file in the SAS is equivalent to Applicant's "priority file". This set of SAS application files or pages is initially stored in the server system (see [0087] and [0090]) and is only streamed to the client when needed.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Shah et al. (Publication No US 2002/0091763).

As to claim 1, Shah et al. teach:

“A method of controlling a user application program executed in a client computer” (see [0082]-[0085]), comprising the step of:

“identifying data to which the user application program refers” (see [0087]-[0090] wherein data identified and used to build the SAS form of the application is equivalent to data as illustrated in Applicant’s claim language);

“grouping data to which the user application program refers for a predetermined period of time into a priority file corresponding to at least one arbitrary data block, based on data that have been required by the user application program upon previous execution of the user application program, and storing the priority file in a predetermined server” (see [0084], [0087] and [0090] wherein generating a Streamed Application Set (SAS) based on profiling data ([0087], [0156] and [0177]) is equivalent to Applicant’s “grouping data...”, each SAS page is equivalent to Applicant’s “priority file”, and the server system is equivalent to Applicant’s “predetermined server”)

“if the user application program does not include a pointer to a file streaming readout function, replacing an existing pointer to a readout function with a substitute pointer to the file streaming readout function” (see [0141] wherein the disclosure of Client Streaming File System instead of the operating system serves all file system requests made by application implies that the application must include some pointer to functions of the streaming file system instead of functions of the operating system; and in order for application to execute properly in the client, the pointer to functions of file system of the operating system (for instance, a readout function) must be replaced by pointer to functions of the streaming file system (for instance, a file

streaming readout function) as illustrated in Applicant's claim language), wherein the file streaming readout function carries out the following steps:

“receiving a file readout request for the arbitrary data block from the user application program” (see [0020] and [0202] wherein a request for code or data is equivalent to Applicant's “a file readout request”; also see [0141]);

“identifying the priority file corresponding to the arbitrary data block by referring to an index storage means containing data offsets for the data blocks, sizes of the data blocks and priority file identifiers associated with the data blocks in the index storage means” (see [0324] for using information from the Size Offset File Table (SOFT) (see [0319] and [0320]) to quickly access the proper file within the directory for serving the proper file blocks to the client wherein the SOFT table is equivalent to Applicant's “index storage means”, the proper file is equivalent to Applicant's “priority file” and the proper file block is equivalent to Applicant's “the arbitrary data block”; also see [0141], [0156], [0187]-[0188] and [0202]);

“determining whether the priority file is stored in the client computer” (see [0188], [0196] and [0197] wherein each application file is equivalent to Applicant's “priority file”);

“if it is determined that the priority file has been stored in the client computer, forwarding data of the file to the user application program” (see [0197] wherein the code or data represents Applicant's “priority file”); and

“if it is determined that the file has not yet been stored in the client computer, receiving some of the data of the file from said predetermined server with the priority file stored therein and storing the some of the data in the client computer and forwarding the received data to the

user application program, the predetermined server being connected to the client computer through a network” (see [0188], [0196], [0197] and [0202]).

As to claim 5, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Shah et al. teach:

“wherein the step of receiving the data of the file from the predetermined server with the file stored therein and caching the received data in the client computer” (see [0186] and [0202]).

As to claim 6, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Shah et al. teach:

“identifying a second client computer with the file stored therein” (see [0664], [0679], and [0694]-[0699] wherein “page” is equivalent to Applicant’s “file”); and

“receiving the file from the identified second client computer and transferring the received file to the user application program” (see [0679] and [0694]-[0699]).

As to claim 7, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Shah et al. teach:

“while the file readout request is not received from the user application program, receiving data expected to be required by the user application program from a second client

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computer with the data stored therein and storing the received data” (see [0142], [0154], [0210] and [0694] wherein the disclosure of prefetching and getting data using peer-caching mechanism is equivalent to Applicant’s claim language).

As to claim 8, this claim is rejected based on arguments given above for rejected claim 7 and is similarly rejected including the following:

Shah et al. teach:

“wherein determination on the data expected to be required by the user application program is made based on data that have been required by the user application program upon previous execution of the user application program” (see [0087] and [0210]).




*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong-Thao Cao whose telephone number is (571) 272-2735. The examiner can normally be reached on 8:30 AM - 5:00 PM (Mon - Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
**CHARLES RONES**  
**SUPERVISORY PATENT EXAMINER**

PTC

December 20, 2006

  
22 December 2006